detecting said data and said at least one instruct signal in said information transmission and passing said data and said at least one instruct signal to said computer;

selecting at least one specific datum within said data; storing said selected at least one specific datum at said memory location; receiving mass medium programming from a programming source; generating at least one receiver specific datum by processing said selected

outputting, based on said at least one instruct signal, at least one of video, audio, and hardcopy, received in said mass medium programming, that shows a significance of said at least one receiver specific datum.

at least one specific datum; and

- 43. (New Claim) The method of claim 42, wherein said step of outputting includes outputting video, said outputted video including a video image that shows information related to said at least one receiver specific datum, said method further comprising the step of overlaying said at least one receiver specific datum on said video image.
- 44. (New Claim) The method of claim 42, wherein said step of outputting includes outputting audio describing said at least one receiver specific datum.
- 45. (New Claim) The method of claim 42, wherein said outputted at least one of video, audio and hardcopy includes video including a graphic image.

- 46. (New Claim) The method of claim 42, further comprising the step of programming said receiver station to process said information transmission, select said at least one specific datum, and store said selected at least one specific datum at said memory location.
- 47. (New Claim) The method of claim 46, wherein said at least one instruct signal is communicated in said information transmission in a varying location, said method further comprising the step of programming said receiver station to locate said at least one instruct signal in said information transmission.
- 48. (New Claim) The method of claim 46, wherein said at least one instruct signal is communicated in said information transmission according to a varying timing pattern, said method further comprising the step of programming said receiver station to detect said at least one instruct signal according to said varying timing pattern.
- 49. (New Claim) The method of claim 46, wherein said at least one instruct signal is communicated in said information transmission in a varying pattern of composition, said method further comprising the step of programming said receiver station to one of detect and identify said at least one instruct signal according to said varying pattern of composition.
- 50. (New Claim) The method of claim 42, wherein said at least one receiver specific datum is outputted in a combined or sequential presentation of said mass medium programming in response to said at least one instruct signal.

- 51. (New Claim) The method of claim 42, wherein said mass medium programming includes at least one of a television program, radio program, and data to be printed, said method further comprising the step of outputting said at least one of a television program, radio program, and data to be printed.
- 52. (New Claim) The method of claim 42, wherein said step of storing is completed before said mass medium programming is received at said receiver station.
- 53. (New Claim) The method of claim 42, wherein said remote source includes said programming source, said method further comprising the step of communicating at least a portion of said information transmission to said output device.
- 54. (New Claim) A method of controlling a remote intermediate mass medium transmitter station to communicate mass medium programming to a remote receiver station and controlling said remote receiver station to deliver a mass medium programming presentation, said method of controlling comprising the steps of:

receiving mass medium programming to be transmitted by said remote intermediate mass medium transmitter station and delivering said mass medium programming to at least one origination transmitter;

receiving at least one instruct signal, said at least one instruct signal being operative at said remote receiver station to select and store data to be used as a source for generating, or delivering at an output device, at least one of video and

audio during said mass medium programming presentation, and communicating said at least one instruct signal to said at least one origination transmitter;

receiving at least one control signal, said at least one control signal being operative at said remote intermediate mass medium transmitter station to control the communication of at least one of said mass medium programming and said at least one instruct signal; and

transmitting said at least one control signal from said at least one origination transmitter, thereby to enable said remote intermediate mass medium transmitter station to transmit at least one information transmission, said at least one information transmission including said mass medium programming and said at least one instruct signal, said mass medium programming and said at least one instruct signal being transmitted by said remote intermediate mass medium transmitter station in accordance with said at least one control signal.

- 55. (New Claim) The method of claim 54, wherein said remote intermediate mass medium transmitter station transmits said mass medium programming in accordance with said at least one control signal, said method further comprising the step of embedding at least a first of said at least one control signal in a programming transmission containing said mass medium programming before transmitting at least some of said mass medium programming from said at least one origination transmitter.
- 56. (New Claim) The method of claim 54, wherein said mass medium programming includes some of a television program and said at least one instruct signal operates at said remote receiver station to perform at least one of:

(a) generating a balance of said television program, and (b) coordinating delivery of said balance and said some of a television program at an output device, said method further comprising the step of embedding said at least one instruct signal in said at least one information transmission containing said only some of a television program.

- 57. (New Claim) The method of claim 54, wherein at least a portion of said at least one instruct signal at said at least one control signal includes downloadable code.
- 58. (New Claim) The method of claim 54, wherein said at least one control signal includes a first control signal including a schedule and a second control signal enabling said remote intermediate mass medium transmitter station to transmit said at least one information transmission according to said schedule.
- 59. (New Claim) The method of claim 54, wherein a receiver specific datum is outputted at said remote receiver station in a presentation of said mass medium programming, said method further comprising the step of transmitting data from said at least one origination transmitter, said data to serve as a basis for outputting said receiver specific datum.
- 60. (New Claim) The method of claim 59, further comprising the step of transmitting a second control signal from said at least one origination transmitter, said second control signal operative at said remote intermediate

mass medium transmitter station to communicate said data to said remote receiver station.

61. (New Claim) A method of controlling a remote intermediate mass medium transmitter station to communicate mass medium programming to a receiver station, with said remote intermediate mass medium transmitter station including at least one of a broadcast and cablecast transmitter, a plurality of selective transmission devices each operatively connected to said at least one of a broadcast and cablecast transmitter for communicating mass medium programming, a mass medium programming receiver for receiving mass medium programming from at least one programming origination transmitter, a control signal detector, and a computer capable of controlling at least one of said plurality of selective transmission devices, and with said remote intermediate mass medium transmitter station adapted to detect the presence of at least one control signal, to control the communication of said mass medium programming in response to said detected at least one control signal, and to deliver to said at least one of a broadcast and cablecast transmitter said mass medium programming, said method comprising the steps of:

receiving said mass medium programming to be transmitted by said remote intermediate mass medium transmitter station and delivering said mass medium programming to said at least one programming origination transmitter, said mass medium programming to be accompanied by at least one instruct signal which becomes effective at said receiver station to perform at least one of selecting and storing data to be used as a source for generating, or delivering at an output device, at least one of video and audio during a presentation of said mass medium programming;

receiving said at least one control signal which operates at said remote intermediate mass medium programming transmitter station to control the communication of at least one of said mass medium programming and said at least one instruct signal; and

transmitting said at least one control signal from said programming origination transmitter before a specific time.

- 62. (New Claim) The method of claim 61, further comprising the step of embedding at least a portion of said at least one instruct signal and said at least one control signal in an information transmission containing said mass medium programming before transmitting said mass medium programming to said remote intermediate mass medium transmitter station.
- 63. (New Claim) The method of claim 61, wherein said at least one control signal includes at least one of code and data which operates at said remote intermediate mass medium transmitter station to identify at least one of said mass medium programming and said at least one instruct signal, said method further comprising the step of:

transmitting a schedule which operates at said remote intermediate mass medium transmitter station to communicate said mass medium programming and said at least one instruct signal to said at least one of a broadcast and cablecast transmitter.

64. (New Claim) A method of controlling at least one of a plurality of receiver stations each of which includes a mass medium programming receiver, a signal detector, at least one of a computer and processor, and with each of said

plurality of receiver stations adapted to detect the presence of a control signal and to accept a subscriber response to an offer communicated in a mass medium programming presentation, said method comprising the steps of:

receiving a first code at a transmitter station, said first code designating at least one of said subscriber response and a product offered in said offer communicated in said mass medium programming presentation;

receiving at said transmitter station an instruct signal which is effective at said at least one of a plurality of receiver stations to perform at least one of selecting and storing a second code, wherein said second code operates to enable delivery of said designated product at said at least one of a plurality of receiver stations;

transferring said first code and said instruct signal to a transmitter at said transmitter station at a specific time; and

transmitting said first code and said instruct signal.

65. (New Claim) The method of claim 64, further comprising the steps of:

embedding at least a portion of said first code and at least a portion of said instruct signal in a programming transmission containing mass medium programming; and

transmitting said programming transmission and said mass medium programming.

66. (New Claim) The method of claim 64, wherein said instruct signal incorporates downloadable processor instructions targeted to said at least one of a computer and processor.

9



- 67. (New Claim) The method of claim 64, wherein said first code causes said at least one of a plurality of receiver stations to compare information contained in said first code to said subscriber response, said method further comprising the step of transmitting said second code.
- 68. (New Claim) The method of claim 64, wherein said product includes at least one of video, audio, text, and hardcopy.
- 69. (New Claim) A method of generating and encoding signals to control a mass medium presentation comprising the steps of:

receiving and storing mass medium programming that contains digital information;

receiving a first instruction said first instruction designating supplemental programming material and having effect at a receiver station to select and store data to be used as a source for performing one of generating and delivering said supplemental programming material during the course of said mass medium presentation;

encoding said first instruction, said step of encoding including translating said first instruction to a control signal, said control signal directing an ancillary processor at said receiver station to coordinate inclusion of said supplemental programming material with said mass medium programming in said mass medium presentation; and

storing said control signal in conjunction with said mass medium programming, thereby to enable said ancillary processor to control said mass medium presentation.

- 70. (New Claim) The method of claim 69, wherein said control signal from said step of encoding directs said ancillary processor to generate a video overlay that is to be included with said digital information in said mass medium programming, said method further comprising the step of embedding said control signal in a programming signal before storing said control signal, said programming signal containing said mass medium programming.
- 71. (New Claim) The method of claim 70, wherein a combined signal is to be transmitted over at least one of a broadcast and cablecast network under control of said ancillary processor, said combined signal to include said mass medium programming and at least one of said control signal and said video overlay, said method further combrising the step of including a first identifier in said control signal.
- 72. (New Claim) The method of claim 71, wherein said receiver station includes a video display and said control signal controls said ancillary processor to generate a series of images to be displayed at said video display in coordination with said mass medium programming, said method further comprising the step of including a second instruction in said control signal, said second instruction operating at said receiver station to perform the other of said one of generating and delivering said supplemental programming material.
- 73. (New Claim) The method of claim 69, wherein said mass medium programming is of a duration, only some of said duration including a specific time interval, said supplemental programming material to be delivered during

said specific time interval, said method further comprising the step of storing said control signal at a memory location which is to be outputted in advance of said specific time interval.

74. (New Claim) The method of claim 89, wherein said mass medium programming and said control signal are stored at a transmitter station, said method further comprising the steps of:

receiving at least one transmitter control instruction; and

outputting said mass medium programming and said control signal from a memory medium in response to said at least one transmitter control instruction.

- 75. (New Claim) The method of claim 74, wherein said at least one transmitter control instruction includes a transmission schedule, said method further comprising the step of transmitting said mass medium programming and said control signal in accordance with said transmission schedule.
- 76. (New Claim) The method of claim 74, further comprising the steps of:

receiving at least one of said mass medium programming and said control signal from a remote origination station; and

communicating said at least one of said mass medium programming and said control signal to said memory medium.

77. (New Claim) The method of claim 74, further comprising the steps of:

Enf.

receiving said memory medium at said transmitter station; and inserting said memory medium into a storage device.

- 78. (New Claim) The method of claim 74, further comprising the step of storing on said memory medium data to evidence one of an availability, use, and usage of one of said mass medium programming and said control signal.
- 79. (New Claim) The method of claim 78, further comprising the step of transmitting said data.
- 80. (New Claim) The method of claim 69, wherein said mass medium programming and said control signal are stored at said receiver station, said method further comprising the steps of:

receiving at least one receiver control instruction; and
performing one of storing and outputting one of said mass medium
programming and said control signal in response to said at least one receiver

control instruction.

- 81. (New Claim) The method of claim 80, wherein said at least one receiver control instruction is received from a remote transmitter station and said step of storing said mass medium programming is performed in response to said at least one receiver control instruction.
- 82. (New Claim) The method of claim 81 wherein said step of receiving said mass medium programming is performed in response to said at least one receiver control instruction, said method further comprising the step of

controlling a tuner to tune a receiver in accordance with said at least one receiver control instruction.

83. (New Claim) A method of communicating mass medium program material to a remote receiver station, said remote receiver station including a mass medium programming receiver, an output device, a control signal detector, a processor operably connected to said output device, and with said remote receiver station being adapted to detect and respond to at least one instruct signal, said method comprising the steps of:

receiving mass medium programming at a transmitter station and delivering said mass medium programming to a transmitter;

receiving said at least one instruct signal at said transmitter station, said at least one instruct signal to be detected at said remote receiver station and operating to perform at least one of selecting and storing data to serve as a source for one of generating, or delivering at an output device, information to be at least one of displayed and outputted audibly during a presentation of said mass medium programming;

transferring said at least one instruct signal to said transmitter; and transmitting an information transmission comprising said mass medium programming and said at least one instruct signal.

84. (New Claim) The method of claim 83, wherein identification data and said at least one instruct signal are embedded in a mass medium programming signal, said mass medium programming signal containing said mass medium programming.



(New Claim) The method of claim 83, wherein said step of transmitting directs said information transmission to a plurality of remote receiver stations at the same time and each of said plurality of remote receiver stations receives and responds to said at least one instruct signal concurrently.

- 86. (New Claim) The method of claim 83, further comprising the steps of receiving said mass medium programming at a receiver in said transmitter station, communicating said mass medium programming from said receiver to a memory location, and storing said mass medium programming at said memory location prior to communicating said mass medium programming to said transmitter at a scheduled time.
- 87. (New Claim) The method of claim 83, wherein said mass medium programming is of a duration, only some of said duration including a specific time interval, information to supplement said mass medium programming to be delivered during said specific time interval, said method further comprising the step of communicating said at least one instruct signal to said transmitter before said the end of said time interval.
- 88. (New Claim) An interactive method for data promotion and delivery for use with an interactive mass medium programming output apparatus comprising the steps of:

outputting first mass medium programming that promotes first data, said interactive mass medium programming output apparatus having an input device to communicate input from a subscriber;

prompting said subscriber during said first mass medium programming to provide subscriber input if said subscriber wants said first data promoted in said step of outputting, said interactive mass medium programming output apparatus having an output device for outputting said first data;

communicating said subscriber input from said input device based on said step of prompting said subscriber, said interactive mass medium programming output apparatus having a processor for processing said subscriber input and controlling delivery of said first data in response to instructions:

delivering said instructions at said interactive mass medium programming output apparatus based on said subscriber input, said instructions controlling said interactive mass medium programming output apparatus;

processing said instructions from said step of delivering, said instructions effective to select and store second data, said second data to be used as a source for performing at least one of generating and delivering said first data during the course of second mass medium programming; and

delivering said first data on the basis of both said instructions and said second data.

89. (New Claim) The method of claim 88, wherein at least one of said instructions is embedded in at least one of a non-visible and non-audible portion of a mass medium programming signal, said mass medium programming signal containing at least one of said first mass medium programming and said second mass medium programming.



- 90. (New Claim) The method of claim 88, wherein information evidencing at least one of the availability, use and usage of one of said first mass medium programming, said first data, and said second data are stored or communicated to a remote data collection station, said method further comprising the step of selecting evidence information that identifies at least one of:
  - (1) a mass medium program;
  - (2) a use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) a source of data;
  - (11) a distributor or an advertisement; and
  - (12) an indication of copyright.
- 91. (New Claim) The method of claim 88, further comprising the step of performing, on the basis of said instructions, one of:
  - (1) receiving a signal containing said second data;
- (2) actuating at least one of a video, audio, and print output device, as appropriate, to output said second data;
  - (3) decrypting at least a portion of said second data;



- (4) controlling a selective transmission device to communicate one of said second mass medium programming and said first data to said output device;
- (5) generating a receiver specific datum to present with said first data; and
- (6) delivering a receiver specific datum at said interactive mass medium programming output apparatus simultaneously or sequentially with at least one of said mass medium programming and said first data.

92. (New Claim) A method of signal processing at a receiver station having a receiver for receiving mass medium programming, an output device operatively connected to said receiver for delivering said mass medium programming and related information, and a processor operatively connected to one of said receiver and said output device for controlling said one of said receiver and said output device, said method comprising the steps of:

inputting to said processor a subscriber datum designating one of mass medium programming to receive and a programming presentation to output;

controlling said receiver station to receive specific mass medium programming;

delivering said specific mass medium programming to said output device; one of generating and selecting a receiver specific datum by processing information stored at said receiver station; and

controlling said receiver station to output to a subscriber one of a simultaneous and a sequential presentation of said receiver specific datum, with said specific mass medium programming, based on said step of one of generating and selecting,

El Conf.

wherein at least one of (i) said receiver specific datum delivers at least one of an economic, financial, and monetary fact and (ii) said specific mass medium programming at least one of explains and makes apparent a meaning of said receiver specific datum.

- 93. (New Claim) The method of claim 92, wherein said receiver specific datum is displayed at a video monitor.
- 94. (New Claim) The method of claim 93, wherein said specific mass medium programming is displayed at said video monitor.
- 95. (New Claim) The method of claim 94, wherein a first of said receiver specific datum and said specific mass medium programming is overlaid on the second of said receiver specific datum and said specific mass medium programming.
- 96. (New Claim) The method of claim 93, wherein said specific mass medium programming is outputted at one of a speaker and a printer.
- 97. (New Claim) The method of claim 93, wherein a viewer can see a graphic image which contains said receiver specific datum and at least a first portion of said specific mass medium programming, said method further comprising the step of printing at least a second portion of said mass medium programming.

WB (

98. (New Claim) The method of claim 92, further comprising the step of programming said receiver station to one of (i) storing a portfolio of stocks, (ii) process data communicated from a remote transmitter station, and (iii) respond to an instruction which causes said receiver station to generate said receiver specific datum.

99. (New Claim) The method of claim 98, further comprising the step of establishing telephone communications which said remote transmitter station.

100. (New Claim) The method of claim 98, wherein a memory is operatively connected to said processor and said data communicated from said remote transmitter station includes at least one of economic, financial, and monetary mass medium programming, said method further comprising the step of processing said at least one of economic, financial, and monetary mass medium programming to store at least one datum of said at least one of economic, financial, and monetary mass medium programming at said memory.

- 101. (New Claim) The method of claim 100, wherein said at least one datum of said at least one of economic, financial, and monetary mass medium programming includes at least one price.
- 102. (New Claim) The method of claim 100, further comprising the step of one of (i) querying said remote transmitter station in order to receive at least one datum of said one of mass medium programming to receive and a programming presentation to output and (ii) causing said remote transmitter station transmit at

least one datum of said one of mass medium programming to receive and a programming presentation to output.

103. (New Claim) A method of providing data to a receiver station from a remote data source, said data for use at the receiver station in generating or outputting a receiver specific datum, said method comprising the steps of:

storing data at said remote data source;

receiving at said remote data source a query from said receiver station; transmitting said data from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing a portion of said transmitted data; and

transmitting from a second remote source to said receiver station a signal which controls said receiver station to select and process an instruct signal which is effective at said receiver station to output said receiver specific datum, with mass medium programming, by processing said data.

- 104. (New Claim) The method of claim 103, wherein one of said first remote data source and said second remote source transmits a signal containing downloadable executable code, said method further comprising the step of storing said downloadable executable code.
- 105. (New Claim) The method of claim 104, wherein a microprocessor at said receiver station is programmed to respond to said signal which controls said receiver station, said method further comprising the step of communicating said downloadable executable code to a memory operatively connected to said microprocessor.

- 106 (New Claim) The method of claim 105, wherein said remote data source communicates a portion of an operating system to said receiver station and said memory stores said portion of said operating system.
- 107. (New Claim) The method of claim 104, wherein said downloadable executable code programs at said receiver station to generate said receiver specific datum.
- 108. (New Claim) The method of claim 107, wherein said signal which controls said receiver station includes an instruction which executes at least a portion of said downloadable executable code.
- 109. (New Claim) The method of claim 104, wherein said second remote source transmits said downloadable executable code.
- 110. (New Claim) A method of communicating subscriber station information from a subscriber station to at least one remote data collection station, said method comprising the steps of:

receiving at said subscriber station information that designates one of an instruct signal to be processed and a first output to be delivered at said subscriber station;

receiving one of a viewer's reaction and a participant's reaction to one of said first output and a second output delivered at said subscriber station;

processing, at said subscriber station, a specific instruct signal which is effective to output a receiver specific datum in mass medium programming at

said subscriber station in response to said one of a viewer's reaction and a participant's reaction, said processing at said subscriber station directed by instructions from said specific instruct signal;

generating an indicium, based on said first step of receiving, confirming one of (a) processing of said specific instruct signal and (b) delivery of said receiver specific datum in said mass medium programming;

transferring said indicium from said step of generating from said subscriber station to said at least one remote data collection station,

wherein at least one of (i) said receiver specific datum delivers at least one of an economic, financial, and monetary fact and (ii) said mass medium programming at least one of explains and makes apparent a meaning of said receiver specific datum.

111. (New Claim) The method of claim 110, further comprising the steps of:

storing a subscriber instruction to receive at least one specific one of mass medium programming, data, news items, and computer control signals; and

receiving said at least one specific one of mass medium programming, data, news items, and computer control signals in accordance with said subscriber instruction.

112. (New Claim) The method of claim 110, wherein said specific instruct signal is input by a subscriber, said method further comprising the steps of:

Conf.

storing a subscriber instruction to one of process and present at least one specific one of mass medium programming, data, news items, and computer control signals; and

one of processing and presenting at least one of said specific one of mass medium programming, data, news items, computer control signals in accordance with said subscriber instruction.

113. (New Claim) The method of claim 110, wherein said specific instruct signal is detected in an information transmission from one of a data source and a programming source, said method further comprising the steps of:

programming a processor to respond to instructions communicated from said one of a data source and a programming source;

receiving said information transmission from said one of a data source and a programming source;

inputting a portion of said information transmission to a control signal detector; and

passing at least a portion of said specific instruct signal one of to and from said processor.

- 114. (New Claim) The method of claim 110, wherein said first output includes said receiver specific datum.
- 115. (New Claim) The method of claim 114, wherein said first output further includes said mass medium programming.

- 116. (New Claim) The method of claim 115, wherein said first output is displayed at a video monitor.
- 117. (New Claim) The method of claim 110, wherein at least a portion of said second output is outputted at one of a speaker and a printer.
- of a resource and a control signal at a receiver station, said receiver station having a processor, and a controlled device, said receiver station adapted to transfer said gathered information to a remote station, said method comprising the steps of:

identifying said one of a resource and a control signal, wherein said one of a resource and a control signal operates at said receiver station to output a receiver specific datum to a subscriber in mass medium programming;

monitoring said one of a resource and a control signal;

storing a record of a use of said one of a resource and a control signal from said step of monitoring; and

communicating information evidencing said use of said one of a resource and a control signal from said step of storing said record from said receiver station to said remote station,

wherein at least one of (i) said receiver specific datum delivers at least one of an economic, financial, and monetary fact and (ii) said mass medium programming at least one of explains and makes apparent a meaning of said receiver specific datum.

E/ Inf.

- (New Claim) The method of claim 118, wherein information stored in said record one of identifies and designates at least one of:
  - (1) \mass medium programming;
  - (2) a proper use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) one of a source of data supplier of data;
  - (11) one of a distributor and an advertisement; and
  - (12) an indication of copyright.
- 120. (New Claim) A method of controlling a remote intermediate transmitter station to communicate at least one instruct signal to at least one receiver station, with said remote intermediate transmitter station including one of a broadcast transmitter and a cablecast transmitter, a plurality of selective transfer devices each operatively connected to said one of a broadcast transmitter and a cablecast transmitter, a receiver for receiving said at least one instruct signal from at least one origination transmitter, a control signal detector, and one of a controller and a computer capable of controlling at least one of said plurality of selective transfer devices, and with said remote intermediate transmitter station adapted to detect at least one control signal, to control the communication of said at least one instruct in response to said at least one control signal, and to

deliver at said one of a broadcast transmitter and a cablecast transmitter said at least one instruct signal, said method comprising the steps of:

receiving said at least one instruct signal to be transmitted by the remote intermediate transmitter station and delivering said at least one instruct signal to said at least one origination transmitter, said at least one instruct signal being operative to control said at least one receiver station to output a receiver specific datum in mass medium programming;

receiving said at least one control signal and delivering said at least one control signals to at least one origination transmitter before a specific time, said at least one control signal being operative at said remote intermediate transmitter station to control said at least one of said plurality of selective transfer devices to communicate said at least one instruct signal; and

transmitting said at least one instruct signal and said at least one control signal from said at least one origination transmitter,

wherein at least one of (i) said receiver specific datum delivers at least one of an economic, financial, and monetary fact and (ii) said mass medium programming at least one of explains and makes apparent a meaning of said receiver specific datum.

121. (New Claim) The method of claim 120, further comprising the step of embedding a specific one of said at least one control signal in an information transmission containing said at least one instruct signal before transmitting at least a portion of said at least one instruct signal to said remote intermediate transmitter station.



- (New Claim) The method of claim 120, wherein said specific time is a scheduled time of transmitting one of said at least one instruct signal and information associated with said at least one instruct signal from said remote intermediate transmitter station.
- 123. (New Claim) The method of claim 120, wherein said mass medium programming includes an image, said method further comprising the step of transmitting said image from said at least one origination transmitter.
- 124. (New Claim) The method of claim 123, wherein said at least one receiver station outputs said mass medium programming at a plurality of output devices, said plurality of output devices including a speaker, said method further comprising the step of transmitting from said at least one origination station audio to be outputted at said speaker.
- 125. (New Claim) The method of claim 123, wherein said image is outputted at said at least one receiver station at one of a video monitor and a printer.
- 126. (New Claim) The method of claim 125, wherein said image is outputted at said at least one receiver station as part of a television program, said method further comprising the step of transmitting the remainder of said television program from said at least one origination transmitter.

- 127. (New Claim) The method of claim 126, wherein said at least one control signal controls said remote intermediate transmitter station to retransmit said television program.
- 128. (New Claim) The method of claim 123, wherein said at least one control signal controls said remote intermediate transmitter station to retransmit said image.

129. (New Claim) A method of controlling a remote transmitter station to deliver a receiver specific mass medium programming presentation at a receiver station, said method comprising the steps of:

receiving mass medium programming at said remote transmitter station and delivering said mass medium programming to a transmitter;

receiving at said remote transmitter station at least one instruct signal which operates to output a receiver specific datum in said mass medium programming;

receiving a control signal which operates at said remote transmitter station to control the communication of said at least one instruct signal and communicating said control signal to said remote transmitter station;

receiving one of a code and a datum designating a specific one of said at least one instruct signal to be transmitted from said remote transmitter station, and said remote transmitter station transferring said designated specific one of said at least one instruct signal to said transmitter; and

transmitting from said remote transmitter station an information transmission including said mass medium programming and said at least one instruct signal, said at least one instruct signal being transmitted one of (i) at at

Ont.

least one specific time and (ii) in at least one of a specific channel and a specific frequency,

wherein at least one of (i) said receiver specific datum delivers at least one of an economic, financial, and monetary fact and (ii) said mass medium programming at least one of explains and makes apparent a meaning of said receiver specific datum.

130. (New Claim) The method of claim 129, wherein said at least one instruct signal includes one of (i) an identification datum of said mass medium programming and (ii) downloadable executable code.

- 131. (New Claim) The method of claim 129, further comprising the step of transmitting said one of a code and a datum from said remote transmitter station.
- 132. (New Claim) A method of controlling at least one of a plurality of mass medium programming receiver stations each of which includes one of a broadcast and a cablecast mass medium programming receiver, at least one output device, a control signal detector, at least one microprocessor capable of responding to an instruct signal, and with each said mass medium programming receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of:

receiving at one of a broadcast and a cable cast transmitter station said instruct signal which is effective at said mass medium programming receiver station to output a receiver specific datum in mass medium programming, and delivering said instruct signal to a transmitter;



receiving at said one of a broadcast and a cablecast transmitter station at least one first control signal which operates to communicate said instruct signal to a specific one of said at least one microprocessor at said at least one of said plurality of receiver stations; and

transferring said at least one first control signal to said transmitter, said transmitter transmitting said instruct signal and said at least one first control signal.

133. (New Claim) The method of claim 132, wherein one of said instruct signal and identification data in respect of said instruct signal is embedded in one of a television signal and a signal containing a portion of television programming.

134. (New Claim) The method of claim 132, wherein a switch at said one of a broadcast and a cablecast transmitter station communicates a plurality of signals selectively from a receiver and a memory to said transmitter, said method further comprising one from the group consisting of:

detecting at least one second control signal which is effective at said one of said broadcast transmitter station and said cablecast transmitter station to instruct communication;

determining a specific signal source from which to communicate said instruct signal to said transmitter;

controlling said switch to communicate said instruct signal to said transmitter in response to said at least one second control signal which is effective at said one of said broadcast transmitter station and said cablecast transmitter station to instruct communication of said instruct signal;

Enf.

controlling said switch to communicate said instruct signal from a selected signal source, and

controlling said switch to communicate to said memory said instruct signal.

135. (New Claim) The method of claim 132, wherein a controller at said one of a broadcast and a cablecast transmitter station controls a switch to communicate to said transmitter one of said mass medium programming and said instruct signal, said method further comprising one from the group consisting of:

detecting at least one second control signal which is effective at said one of a broadcast and a cablecast transmitter station to instruct transmission;

inputting to said controller at least one second control signal which is effective to control said switch;

controlling said switch to communicate said instruct signal according to a transmission schedule;

controlling said switch to communicate said instruct signal from a specific one of a plurality of instruct signal sources; and

controlling said switch to communicate said instruct signal to a selected one of a plurality of transmitters.

136. (New Claim) The method of claim 132, further comprising one from the group consisting of:

transmitting to said at least one of said plurality of mass medium programming receiver stations at least one processor datum that designates at least one of a time and a channel of transmission of said instruct signal;



transmitting to said at least one of said plurality of mass medium programming receiver stations at least one processor datum that specifies one of (i) a title of said mass medium programming and (ii) a subject matter contained in said mass medium programming; and

transmitting to said at least one of said plurality of mass medium programming receiver stations a control signal to cause said at least one of said plurality of mass medium programming receiver stations to tune to one of a broadcast transmission and a cablecast transmission containing said instruct signal.

137. (New Claim) An interactive method for mass medium programming promotion and delivery for use with an interactive television viewing apparatus comprising the steps of:

displaying television programming that promotes mass medium programming on said interactive television viewing apparatus, said interactive television viewing apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said television programming for a reply if said subscriber wants said mass medium programming promoted during said step of displaying, said interactive television viewing apparatus having a memory for storing one of a code and a datum, said one of a code and a datum designating said mass medium programming;

receiving said reply from said subscriber at said input device in response to said step of prompting said subscriber, said interactive television viewing apparatus having a processor for processing said subscriber reply and said one of a code and a datum;



processing said reply from said step of receiving said reply and selecting said one of a code and a datum, said interactive television viewing apparatus having a transmitter for communicating information to a remote station;

communicating said selected one of a code and a datum to said remote station, said interactive television viewing apparatus and said remote station forming a network with a plurality of transmitter stations;

assembling, in said network, a signal which is effective at said interactive television viewing apparatus to cause said processor to output a receiver specific datum in said mass medium programming, said interactive television viewing apparatus having a receiver for receiving at least a portion of said assembled signal from said remote station:

delivering said assembled signal to said processor at said interactive television viewing apparatus; and

outputting said receiver specific datum in said mass medium programming on the basis of said assembled signal.

- 138. (New Claim) The method of claim 137, wherein said at least a portion of said assembled signal is embedded in the non-visible portion of a television signal.
- 139. (New Claim) The method of claim 137, wherein information evidencing one of an availability, a use, and a usage of one of said television programming and said mass medium programming is one of stored and communicated to a remote data collection station, said method further comprising the step of selecting information that one of identifies and designates at least one of:

E/ Cm/

- (1) mass medium programming;
- (2) a use of data;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of thansmission;
- (9) a unique identifier datum;
- (10) one of a source of data and a supplier of data;
- (11) one of a distributor and an advertisement; and
- (12) an indication of copyright.
- 140. (New Claim) The method of claim 137, wherein said assembled signal incorporates executable code said method further comprising the steps of communicating said executable code to said processor and performing, on the basis of said executable code, one selected from the group consisting of:
  - (1) receiving a signal containing said mass medium programming;
- (2) actuating one of a video device, an audio device, a print storage device, and a print output device to one of store and output said mass medium programming;
  - (3) decrypting at least a portion of said mass medium programming;
- (4) controlling a selective transfer device to communicate said mass medium programming to one of a storage device and an output device;
- (5) generating said receiver specific datum on the basis of information contained in said mass medium programming; and



(6) delivering said receiver specific datum at said interactive television viewing apparatus one of simultaneously and sequentially with a portion of said mass medium programming.

141. (New Claim) An interactive method for mass medium programming promotion and delivery for use with an interactive mass medium programming output apparatus comprising the steps of:

outputting on said interactive mass medium programming output apparatus first mass medium programming that promotes a specific fashion of presenting information to supplement said first mass medium programming, said interactive mass medium programming output apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said step of outputting for input if said subscriber wants said information to supplement said first mass medium programming presented in said specific fashion promoted, said interactive mass medium programming output apparatus having an output device for outputting information in said specific fashion;

receiving said input from said subscriber at said input device in response to said step of prompting said subscriber, said interactive mass medium programming output apparatus having a processor for processing said subscriber input and controlling delivery of said information to supplement said first mass medium programming in response to instructions;

delivering said instructions to said interactive mass medium programming output apparatus in response to said step of receiving said input, said instructions controlling said interactive mass medium programming output apparatus;

E/

processing said instructions from said step of delivering, said instructions effective to output a receiver specific datum in one of said first mass medium programming and second mass medium programming; and

presenting said information to supplement said first mass medium programming in said specific fashion on the basis of said instructions.

- 142. (New Claim) The method of claim 141, wherein at least one of said instructions is embedded in one of a non-visible portion and a non-audible portion of a mass medium programming signal.
- 143. (New Claim) The method of claim 141, wherein information evidencing one of an availability, a use, and a usage of one of said first mass medium programming and said information to supplement first mass medium programming is one of stored and communicated to a remote data collection station, said method further comprising the step of selecting evidence information that one of identifies and designates at least one of:
- (1) one of said first mass medium programming and said second mass medium programming;
  - (2) a use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;



- $(\mathfrak{N})$  one of a source of data and a supplier of data;
- (11) one of a distributor and an advertisement; and
- (12)  $\setminus$  an indication of copyright.
- 144. (New Claim) The method of claim 141, wherein said instructions incorporate executable code said method further comprising the steps of communicating said executable code to said processor and performing, on the basis of said executable code one selected from the group consisting of:
- (1) receiving a signal containing at least a portion of said information to supplement said first mass medium programming;
- (2) actuating one of a video device, an audio device, and a print output device to one of output at least a portion of said information to supplement said first mass medium programming and output information in said specific fashion;
- (3) decrypting at least a portion of said information to supplement said first mass medium programming;
- (4) controlling a selective transfer device to communicate to a specific output device specific output to be processed in order to deliver at least a portion of said information to supplement said first mass medium programming;
  - (5) generating said receiver specific datum; and
- (6) delivering said receiver specific datum at said interactive mass medium programming output apparatus one of simultaneously or sequentially with said one of said first mass medium programming and said second mass medium programming.



(New Claim) A method of signal processing at a receiver station, said receiver station including a receiver and a processor, said method comprising the steps of:

receiving identification signals that identify specific signal content for at least one of a plurality of concurrent one of broadcast and cablecast signal transmissions;

providing a comparison signal to said processor;

comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of concurrent one of broadcast and cablecast signal transmissions;

tuning said received, based on said generated control signal, to receive said desired one of said plurality of concurrent one of broadcast and cablecast signal transmissions;

inputting at least a portion of said desired one of said plurality of concurrent one of broadcast and cablecast signal transmissions to said processor; and

responding to an instruct signal detected in said desired one of said plurality of concurrent one of broadcast and cablecast signal transmissions which is effective to output a receiver specific datum in mass medium programming,

wherein at least one of (i) said receiver specific datum delivers at least one of an economic, financial, and monetary fact and (ii) said mass medium programming at least one of explains and makes apparent a meaning of said receiver specific datum.

146. (New Claim) A method of controlling a receiver station comprising the steps of:

Enf.

detecting one of a presence and an absence of one of a broadcast and a cablecast control signal;

inputting an instruct-to-react signal to a processor based on said step of detecting;

controlling said processor to output specific information in response to said step of inputting; and

outputting a receiver specific datum in mass medium programming at said receiver station on the basis of information received from said processor based on said step of controlling.

147. (New Claim) The method of claim 146, wherein a buffer is operatively connected to said processor for buffering input to said processor, said method further comprising the step of:

bypassing said buffer and inputting said instruct-to-react signal directly to said processor.

148. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a tuner to tune a receiver to receive said one of said television channel and said television programming designated by said processed datum.

149. (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one specific channel of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:



controlling a tuner to tune a converter to receive said at least one specific channel designated by said processed datum.

150. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a selective transfer device to input to a control signal detector at least a portion of said one of said television channel and said television programming designated by said processed datum.

151. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a control signal detector to search for at least one control signal in said one of said television channel and said television programming designated by said processed datum.

152. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a selective transfer device to input to a computer a control signal detected in said one of said television channel and said television programming designated by said processed datum.



153. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a computer to respond to control signals detected in said one of said television channel and said television programming designated by said processed datum.

154. (New Claim) The method of claim 146, wherein said processor processes a datum designating video programming, said method further comprising the step of:

controlling a video monitor to display said video programming designated by said processed datum.

155. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a recorder to one of record and play one of video and audio contained in said one of said television channel and said television programming designated by said processed datum.

156. (New Claim) The method of claim 146, wherein said processor processes a datum designating one of a television channel and television programming, said method further comprising the step of:

controlling a selective transfer device to communicate to one of a video recorder and a television monitor said one of said television channel and said television programming designated by said processed datum.

15% (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific frequency of one of a multichannel cable and a multichannel broadcast signal, said method further comprising the step of:

controlling a selective transfer device to input to a control signal detector at least a portion of said at least one of a specific channel and a specific frequency designated by said processed datum.

158. (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific frequency of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:

controlling a control signal detector to search for at least one control signal in said at least one of a specific channel and a specific frequency designated by said processed datum.

159. (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific frequency of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:

controlling a selective transfer device to input to a computer control signals detected in said at least one of a specific channel and a specific frequency designated by said processed datum.

160.\ (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific frequency of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:

controlling a computer to respond to control signals detected in said at least one of a specific channel and a specific frequency designated by said processed datum.

161. (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific frequency of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:

causing a video monitor to display video contained in said at least one of a specific channel and a specific frequency designated by said processed datum.

162. (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific frequency of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:

controlling a recorder to one of record and play one of video and audio contained in said at least one of a specific channel and a specific frequency designated by said processed datum.

163. (New Claim) The method of claim 146, wherein said processor processes a datum designating at least one of a specific channel and a specific

frequency of one of a multichannel cable signal and a multichannel broadcast signal, said method further comprising the step of:

controlling a selective transfer device to communicate to one of a storage device and an output device said at least one of a specific channel and a specific frequency designated by said processed datum.

164. (New Claim) The method of claim 146, wherein said processor processes a datum designating audio programming, said method further comprising the step of:

causing a speaker to output said audio programming designated by said processed datum.

165. (New Claim) The method of claim 146, wherein said processor processes a datum designating video programming, said method further comprising the step of:

causing a video monitor to cease displaying one of said receiver specific datum and said mass medium programming based on said datum.

166. (New Claim) The method of claim 146, wherein said processor processes a datum designating audio programming, said method further comprising the step of:

causing a speaker to cease outputting one of said receiver specific datum and said mass medium programming based on said datum.



- 167. (New Claim) The method of claim 146, further comprising the step of detecting executable code in said one of a broadcast and a cablecast control signal based on said step of controlling.
- 168. (New Claim) The method of claim 167, further comprising the steps of:

detecting an instruction; and executing said executable code in response to said instruction.

- 169. (New Claim) The method of claim 168, wherein said executable code is detected before said instruction is detected, said method further comprising the step of storing said executable code.
- 170. (New Claim) The method of claim 168, wherein said instruction is detected in a multichannel signal.
- 171. (New Claim) The method of claim 170, wherein said multichannel signal contains a television signal and said instruction is detected in said television signal.
- 172. (New Claim) The method of claim 170, wherein said multichannel signal contains said one of a broadcast and a cablecast control signal.
- 173. (New Claim) A method of signal processing at a receiver station having at least one reprogrammable controller, at least one processor, and an

output device, each reprogrammable controller being capable of controlling one of said at least one processor, said method comprising the steps of:

- (1) \controlling a processor at said receiver station to extract code from a signal received from a remote source;
- (2) controlling a processor at said receiver station to generate information content by processing stored information in response to said code, said information content including at least one of video, audio, and a graphic, said information content one of completing and supplementing a television program;
- (3) communicating a signal containing said information content to a television monitor; and
- (4) displaying said information content with said television program at said television monitor.
- 174. (New Claim) The method of claim 173, further comprising the step of:

storing information regarding a function performed by said at least one reprogrammable controller in response to said code.

- 175. (New Claim) The method of claim 173, further comprising the step of explaining the significance of said information content in said television program.
- 176. (New Claim) The method of claim 173, further comprising the step of controlling a processor at said receiver station to detect and identify a control signal in one of a television and radio transmission.



- 177. (New Claim) The method of claim 173, wherein said step of communicating a signal containing said information content further comprises controlling a signal generator to communicate a signal containing said information content to a television monitor.
- 178. (New Claim) A method of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, at least one programmable processor, and with each of said receiver stations being adapted to detect a control signal and being programmed to process processor instructions, said method comprising the steps of:
- (1) receiving said processor instructions at an origination station, said processor instructions being effective at said receiver station to program said at least one programmable processor and, when executed, to generate television output;
- (2) transferring said processor instructions from said origination station to an origination transmitter;
- (3) receiving a control signal at said origination station, said control signal operative at each of said plurality of receiver stations to execute said processor instructions; and
- (4) transferring said control signal from said origination station to said origination transmitter, and transmitting an information transmission comprising said processor instructions and said control signal.



- 179. (New Claim) The method of claim 178, wherein one of said processor instructions and identification data in respect of said processor instructions is embedded in a television signal.
- 180. (New Claim) The method of claim 178, wherein television programming is displayed at said receiver station and said processor instructions program said programmable processor to perform one of: (a) output video, audio, or text that completes or supplements said television programming, (b) process a viewer reaction to said television programming, and (c) select information that completes or supplements said television programming, said method further comprising the step of transmitting said television programming.
- 181. (New Claim) The method of claim 178, wherein said control signal incorporates at least a portion of said processor instructions.
- 182. (New Claim) A method of providing data of interest to a subscriber at a receiver station from a remote data source, said data for use at the receiver station in generating and outputting at least one receiver specific datum for output in television programming, said receiver station having at least one processor, said method comprising the steps of:

storing data at said remote data source;

receiving at said remote data source a query from said receiver station; transmitting said data from said remote data source to said receiver station in response to said query, said receiver station selecting and storing said

transmitted data;

transmitting from a second remote source to said receiver station a signal which controls said receiver station to deliver processor instructions to said at least one processor and to generate television output containing said at least one receiver specific datum by processing said transmitted data in response to said processor instructions.

- 183. (New Claim) A method of gathering information regarding the use of resource or signal at a receiver station, said receiver station having a processor, and a controlled device, said receiver station transferring said gathered information to a remote station, said method comprising the steps of:
- (1) identifying at least one of a resource which generates television output information content and a control signal which is effective to deliver processor instructions to a processor at said receiver station and cause said processor to generate television output information content in response to said processor instructions;
- (2) monitoring the use of said at least one of said resource and said control signal;
- (3) storing a record of the use of said at least one of said resource and said control signal; and
- (4) communicating information regarding the use of said at least one of said resource and said control signal based upon said record from said receiver station to said remote station.
- 184. (New Claim) The method of claim 183, wherein said information identifies at least one of:
  - (1) a mass medium program;



- (2) a proper use of programming;
- $(3) \setminus a$  transmission station;
- (4) \a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) a source or supplier of data; and
- (11) a publication, article, publisher, distributor, or advertisement.
- 185. (New Claim) A method of controlling a remote intermediate transmitter station to communicate television programming to at least one receiver station, with said remote intermediate transmitter station including a transmitter for transmitting said television programming, a plurality of selective transfer devices each operatively connected to said transmitter, a television receiver, a control signal detector, and a computer capable of controlling at least one of said plurality of selective transfer devices, and with said remote intermediate transmitter station being adapted to detect the presence of at least one control signal, to control the communication of said television programming in response to said detected at least one control signal, and to deliver to said transmitter said television programming, said method comprising the steps of:
- (1) receiving at least one origination station television programming to be transmitted by a remote intermediate transmitter station to at least one receiver station and delivering said television programming to at least one transmitter;



- (2) receiving at said at least one origination station at least one instruct signal to be transmitted by said remote intermediate transmitter station to said at least one receiver station, said at least one instruct signal being effective at said at least one receiver station to deliver code to a processor and generate television output in response to said code;
- (3) receiving at said at least one origination station said at least one control signal which operates at said remote intermediate transmitter station to control the communication of said television programming and said at least one instruct signal; and
- (4) transferring said at least one control signal and said at least one instruct signal to said transmitter to be transmitted to said remote intermediate transmitter station.
- 186. (New Claim) The method of claim 185, further comprising the step of:

transmitting a schedule which operates at said remote intermediate transmitter station to communicate said television programming to said transmitter at a specific time.

187. (New Claim) The method of claim 186, wherein one of said specific time is a scheduled time of transmitting said television programming at said remote intermediate transmitter station, and said at least one control signal becomes effective at said remote intermediate transmitter station to control at least one of said plurality of selective transfer devices at different times.

E/

188. (New Claim) The method of claim 185, further comprising the step of embedding a said at least one control signal in a signal containing said specific television programming before transmitting said television programming to said remote intermediate transmitter station.

189. (New Claim) A method of processing signals to control a television programming presentation, said method comprising the steps of:

receiving a television signal containing television programming; communicating said television signal to a storage device; storing said television signal at said storage device;

receiving processor instructions which are effective at a receiver station to program a programmable processor and control said programmable processor to generate television output, said television output to include at least one of video, audio, and a graphic, said television output one of completing and supplementing said television programming;

communicating said processor instructions to said storage device; and storing said processor instructions at said storage device in association with said television programming.

190. (New Claim) The method of claim 189, wherein said television programming comprises at least one of video, audio, and text, said method further comprising one from the group consisting of:

embedding said code in one of a television and a radio signal;

embedding a code in a signal including said television programming that enables said processor to receive and output information that completes or supplements said television programming in accordance with said code;

E/ Conf communicating a program unit identification code to said storage device and storing said program unit identification code at said storage device with said television programming;

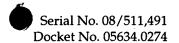
communicating to said storage device and storing in said storage device information to be processed at a user station to evidence an availability, use, or usage of at least one of video, audio, and text associated with said television programming;

storing in said torage device an instruct signal which is effective at a user station to select said television programming.

191. (New Claim) The method of claim 189, wherein a command executes said processor instruction's at a specific time during said television programming presentation, said method further comprising the step of embedding said command in a portion of said television signal which is outputted from said storage device prior to said specific time.

- 192. (New Claim) A method of communicating television program material to at least one of a plurality of receiver stations each of which includes a television receiver, a television monitor, a control signal detector, a programmable processor operatively connected to said television monitor, said programmable processor being programmed to detect and respond to at least one instruct signal in a transmission, said method comprising the steps of:
- (1) receiving a television program at a transmitter station and delivering said television program to a transmitter;
- (2) receiving and storing at least one instruct signal at said transmitter station, said at least one instruct signal operates at said at least one of said





plurality of receiver stations to deliver processor instructions to said programmable processor and cause said programmable processor to generate television output in response to said processor instructions, said television output including at least one of video, audio, and a graphic, said television output one of completing and supplementing said television program;

- (3) transferring said at least one instruct signal from said transmitter station to said transmitter; and
- (4) transmitting from said transmitter station to said receiver station an information transmission comprising said television program and said at least one instruct signal.
- 193. (New Claim) The method of claim 192, wherein one of identification data and said at least one instruct signal is embedded in a television signal containing said television program.
- 194. (New Claim) The method of claim 192, wherein said step of transmitting directs said information transmission to a plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said at least one instruct signal concurrently.
- 195. (New Claim) The method of claim 192, wherein said step of transmitting directs said information transmission to a plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.



196. (New Claim) The method of claim 192, further comprising the steps of receiving said television program at a receiver in said transmitter station, communicating said television program from said receiver to a memory location, and storing said television program at said memory location for a period of time prior to communicating said television program to said transmitter.

197. (New Claim) An interactive method for data promotion and delivery for use with an interactive television apparatus, said method comprising the steps of:

displaying a television programming that promotes data, said interactive television apparatus having an input device to receive input from a subscriber;

prompting said subscriber during said television programming whether said subscriber wants said data, said interactive television apparatus having a memory for storing a code;

receiving a reply from said subscriber at said input device in response to said step of prompting, said interactive television apparatus having a programmable processor for processing said subscriber reply and said data;

processing said reply and selecting a code designating said data, said interactive television apparatus having a transmitter for communicating information regarding said reply to a remote station;

communicating said selected code to said remote station, said interactive television apparatus and said remote station comprising a network having a plurality of transmitter stations;

assembling, in said network, a signal which is effective at said interactive television apparatus to deliver processor instructions to said programmable processor and cause said programmable processor to generate television output,

El

said television output including at least one of video, audio, and a graphic, said television output one of completing and supplementing a television program, said interactive television program output apparatus having a receiver for receiving at least a portion of said signal from said remote station;

processing said designated data in accordance with said processor instructions; and

generating said television output based on said step of processing.

- 198. (New Claim) The method of claim 197, wherein said at least said portion of said signal is embedded in the non-visible portion of a television signal containing at least one of said television programming and said television program.
- 199. (New Claim) The method of claim 197, wherein information evidencing the availability, use or usage of one of said television program, said television programming and said data is at least one of stored and communicated to a remote data collection station, said method further comprising the step of selecting evidence information that identifies at least one of:
  - (1) said television programming and said television output;
  - (2) a use of data;
  - (3) a transmission station;
  - (4) a receiver station
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;



- (8)  $\sqrt{a}$  time of transmission;
- (9) a unique identifier datum;
- (10) a source or supplier of data; and
- (11) a publication, article, publisher, distributor, or an advertisement.
- 200. (New Claim) The method of claim 197, wherein said signal incorporates said processor instructions, said method further comprising the steps of:

communicating said processor instructions to said programmable processor; and

performing, on the basis of said processor instructions, one selected from the group consisting of:

- (1) receiving a signal containing said data;
- (2) actuating at least one of a video, audio, and print storage or output device, as appropriate, to store or output said data;
  - (3) decrypting at least a portion of said data;
- (4) controlling a selective transfer device to communicate said data to a storage device or an output device;
- (5) generating a receiver specific datum to on the basis of said data; and
- (6) delivering said television programming at said interactive mass medium program output apparatus with said data.
- 201. (New Claim) A method for promotion and delivery of interactive television programming for use with an interactive television viewing apparatus said interactive method comprising the steps of:



displaying a television program that promotes television programming, said interactive television viewing apparatus having an input device to receive input from a viewer;

prompting said viewer during said television program whether said viewer wants said television programming, said interactive television viewing apparatus having an output device for outputting said television programming;

receiving a reply from said viewer at said input device in response to said step of prompting, said interactive television viewing apparatus having a programmable processor for processing said viewer reply and controlling delivery of said television programming in response to instructions;

delivering said instructions at said interactive television viewing apparatus in response to said step of receiving a reply, said instructions programming said programmable processor and controlling said interactive television viewing apparatus;

processing said instructions, said instructions effective to cause said programmable processor to generate television output, said television output including at least one of video, audio, and a graphic, said television output one of completing and supplementing said television programming; and

delivering said television programming based on said step of processing.

- 202. (New Claim) The method of claim 201, wherein at least one of said instructions is embedded in the non-visible portion of a television signal.
- 203. (New Claim) The method of claim 201, wherein information evidencing the availability, use or usage of at least one of said television program and said television programming is stored or communicated to a remote data



collection station, said method further comprising the step of selecting evidence information that identifies at least one of:

- (1) \ at least one of said television program and said television program;
- (2) a use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broad ast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a unique identifier datum;
- (10) a source or supplier of data; and
- (11) a publication, article, publisher, distributor, or an advertisement.

204. (New Claim) The method of claim 201, further comprising the steps of:

communicating said instructions to said programmable processor;
programming said programmable processors based on said instructions; and
performing, on the basis of said processor instructions, one selected from
the group consisting of:

- (1) receiving a signal containing said television programming;
- (2) actuating at least one of a video, audio, and print output device, as appropriate, to output said television programming;
  - (3) decrypting at least a portion of said television programming;

El Conf.

- controlling a selective transfer device to communicate selected specific output to a selected specific output device;
- (5) \ generating a receiver specific datum to present with said television programming; and
- (6) delivering a receiver specific datum at said interactive television viewing apparatus with said television programming.
- 205. (New Claim) A method of controlling a receiver station, said method comprising the steps of:

detecting one of the presence and absence of at least one of a broadcast and a cablecast control signal.

inputting a stored instruct-to-react signal to a first processor based on said step of detecting;

controlling said first processor to output specific information in response to said step of inputting said instruct-to-react signal; and

delivering processor instructions to a second processor and generating television output on the basis of said specific information received from said first processor from said step of controlling said first processor, said television output including at least one of video, audio, and a graphic, said television output one of completing and supplementing television programming.

206. (New Claim) The method of claim 205, wherein a buffer is operatively connected to said first processor for buffering input, said method further comprising the step of:

bypassing said buffer and inputting said instruct-to-react signal directly to said first processor.

El Conf.

207. (New Claim) The method of claim 205, wherein at least one of said first processor and said second processor processes a datum designating one of a television channel and a television program, said method further having one step of the group consisting of:

controlling a tuner to tune a receiver to receive the television channel or television program/designated by said processed datum;

controlling a selective transfer device to input to a control signal detector said television channel or television program designated by said processed datum;

controlling a control signal detector to search for a control signal in said television channel or television program designated by said processed datum;

controlling a selective transfer device to input to a computer control signals detected in said television channel or television program designated by said processed datum;

controlling a computer to respond to control signals detected in said television channel or television program designated by said processed datum;

controlling a television monitor to display video or audio contained in said television channel or television program designated by said processed datum;

controlling a video recorder to record or play video or audio contained in said television channel or television program designated by said processed datum; and

controlling a selective transfer device to communicate to a video recorder or a television monitor said television channel or television program designated by said processed datum.

E/

208. (New Claim) The method of claim 205, wherein said at least one of said first processor and said second processor processes a datum designating at least one specific channel of a multichannel signal, said method further having one step of the group consisting of:

controlling a tuner to tune a converter to receive said at least one specific channel designated by said processed datum;

controlling a selective transfer device to input to a control signal detector at least a portion of said at least one specific channel designated by said processed datum;

controlling a control signal detector to search for a control signal in said at least one specific channel designated by said processed datum;

controlling a selective transfer to input to a computer control signals detected in said at least one specific channel designated by said processed datum;

controlling a computer to respond to control signals detected in said at least one specific channel designated by said processed datum;

controlling a television monitor to display at least one of video and audio contained in said at least one specific channel designated by said processed datum;

controlling a video recorder to record of play at least one of video and audio contained in said at least one specific channel designated by said processed datum; and

controlling a selective transfer device to communicate to a storage device or an output device said at least one specific channel designated by said processed datum.



209. (New Claim) A method of processing signals to deliver at a receiver station a receiver specific programming presentation, said receiver station having a computer and an output device, said computer having a memory location for storing data, said output device being capable of outputting one of video, audio, and hardcopy, said method comprising the steps of:

receiving one of a broadcast and a cablecast data transmission from a remote data source and passing said data transmission to said computer;

processing said data transmission at said computer and selecting at least one datum of interest;

storing said selected at least one datum of interest at said memory location;

receiving a mass medium program from a programming source and outputting said mass medium program at said output device, said mass medium program including audio;

generating a receiver specific datum related to said mass medium program by processing data stored at said memory location; and

outputting at least one of a simultaneous and a sequential output of said mass medium program and said receiver specific datum.

210. (New Claim) The method of claim 209, further comprising the step of programming said receiver station to process said one of a broadcast and a cablecast data transmission, select a datum of interest communicated in said one

7,

of a broadcast and a cablecast transmission, and store said selected datum at said memory location.

211. (New Claim) The method of claim 210, wherein said step of outputting is in response to a command, said method further comprising at least one of:

inputting a subscriber command at said receiver station; and detecting at said receiver station a command communicated from a remote station.

- 212. (New Claim) The method of claim 210, wherein said mass medium program includes at least one of video and print.
- 213. (New Claim) The method of claim 212, wherein said step of generating a receiver specific datum is in response to an instruct signal communicated from said programming source, said method further comprising the step of programming said receiver station to process an instruct signal communicated from said programming source.
- 214. (New Claim) The method of claim\213, wherein said step of outputting is in response to an instruct signal communicated from said programming source, said method further comprising the step of programming said receiver station to one of locate and identify an instruct signal, said instruct signal being effective to output at a computer transmission.

215. (New Claim) The method of claim 210, wherein said step of storing occurs before the commencement of said step of receiving.

216. (New Claim) The method of claim 210, further comprising the steps of:

one of selecting and preparing to communicate to said output device, one of a series of receiver specific data;

communicating at least one of said series of receiver specific data; and ceasing to communicate said at least one series of receiver specific data.

217. (New Claim) A method of controlling a plurality of receiver stations each of which includes one of a video, audio, and a text receiver, a signal detector, and a processor, each one of said plurality of receiver stations being adapted to detect the presence of at least one control signal and to process downloadable code, said method of controlling comprising the steps of:

receiving at a transmitter station at least some of said downloadable code which is effective in a target processor at each one of said plurality of receiver stations to select and store data to be used as a source for generating at least one receiver specific datum for presentation during the course of a mass medium program, said mass medium program including audio;

transferring said downloadable code to a transmitter;

receiving at least one control signal at said transmitter station, wherein said at least one control signal is operative to execute said downloadable code; and

transferring said at least one control signal to said transmitter, and transmitting an information transmission comprising the downloadable code and said at least one control signal.

- 218. (New Claim) The method of claim 217, wherein at least one of said downloadable code and some identification data in respect of said downloadable code are embedded in a television signal.
- 219. (New Claim) The method of claim 217, wherein a television program is displayed at a receiver station, said downloadable code programs said receiver station processor to one of output one of video, audio, and text in the context of said television program, to process a viewer reaction to said television program, and to select information that supplements said television program.
- 220. (New Claim) The method of claim 217, wherein said at least one control signal incorporate some of said downloadable code.
- 221. (New Claim) A method of collecting a datum of interest at a receiver station, said datum of interest being effective for use in generating at said receiver station one of user specific programming and output, said method comprising the steps of:

storing at said receiver station an identification signal identifying said datum of interest;

querying a remote data source to obtain information regarding said datum of interest;

receiving from said remote data source information regarding said datum of interest in response to said step of querying; and

storing at said receiver station a received datum for subsequent processing in response to an instruct signal which is effective to select and store data to be used as a source for generating at least one receiver specific data for presentation during the course of a mass medium program, said mass medium program including audio.

222. (New Claim) The method of claim 221, having one step selected from the group consisting of:

programming said receiver station to query said remote data source at one of a particular time and in a particular fashion;

selecting at the receiver station a received datum to store;

delivering to a user at an output device some processed information of the stored received datum, said processed information being delivered one of simultaneously and sequentially with a mass medium program; and

selecting a mass medium program for display at said output device along with processed information of said stored received datum.

El Cont. 223. (New Claim) The method of claim 221, wherein said stored received datum is processed in response to a signal that is received at said receiver station after said received datum is stored, said method further comprising the steps of:

identifying a signal which is effective to process said stored received datum; and

communicating said identified signal to one of a computer and a processor.

transmitter station to communicate data to at least one receiver station, with said remote intermediate data transmitter station including an intermediate transmitter adapted for transmitting said data, a plurality of selective transfer devices each operatively connected to said intermediate transmitter, a data receiver for receiving said data from at least one origination transmitter station, a control signal detector, and a one of a controller and a computer capable of controlling at least one of said selective transfer devices, said remote intermediate data transmitter station being adapted to detect at least one control signal, to control the communication of said data, and to deliver said data at said intermediate transmitter, said method comprising the steps of:

receiving said data at said at least one origination transmitter station and delivering said data to at least one origination transmitter, said data including an instruct signal which is effective at a receiver station to select and store said data

EM

for use as a source for generating at least one receiver specific datum for presentation during the course of programming presentation that includes audio;

receiving said at least one control signal which is effective at said remote intermediate data transmitter station to control the communication of said data; and

transmitting said at least one control signal from said at least one origination transmitter before a specific time.

- 225. (New Claim) The method of claim 224, wherein said specific time is a scheduled time of transmitting one of said data and said instruct signal from said remote intermediate data transmitter station.
- 226. (New Claim) The method of claim 224, further comprising the step of embedding a specific one of said at least one control signal in said data before transmitting at least one of said data to said remote intermediate data transmitter station.
- 227. (New Claim) A method of processing signals to control a television programming presentation, said method comprising the steps of:

receiving a television signal containing television programming and communicating said television signal to a storage device;

receiving a first instruct signal which is effective to instruct a processor to select and store data to be used as a source for generating one or more receiver specific data for presentation during the course of said television programming;

El

selecting at least one of:

- (1) a time at which to communicate said first instruct signal; and
- (2) a location to which to communicate said first instruct signal;

communicating said first instruct signal at least one of at said selected time and to said selected location; and

storing said television signal and said first instruct signal at said storage device.

228. (New Claim) The method of claim 227, further comprising one of: embedding said first instruct signal in said television signal;

embedding a code in said unit of television programming that enables one of a computer and a controller to control a presentation of said unit of television programming in accordance with said first instruct signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said unit of television programming;

communicating to and storing at said storage device some information to evidence one of an availability, a use, and a usage of said unit of television programming at a user station;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate some output to be associated with said unit of television programming;

signal which is effective to generate some output to be associated with one of a product, a service, and an information presentation;

communicating to and storing at said storage device a second instruct signal which is effective to display one of a combined presentation and a sequential presentation of a mass medium program and a user specific datum;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said unit of television programming;

communicating to and storing at said storage device a second instruct signal which is effective to one of communicate to a remote station a query in respect of information to be associated with said unit of television programming and to enable display of said unit of television programming;

communicating to and storing at said storage device a second instruct signal which is effective to control a user station to receive information to supplement said unit of television programming;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal; and

communicating to and storing at said storage device one of a code and a datum to serve as a basis for enabling an output device to one of display at least some of said unit of television programming and to enable a processor to process some executable code.

E/m/

- 229. (New Claim) The method of claim 227, wherein said selected location is in said television signal, said method further comprising the step of storing some information at said storage device that evidences at least one of:
  - (1) a title of a television program;
  - (2) a proper use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a identification \( \frac{1}{2} \) (an instruct signal;
  - (10) one of a source and a supplier of data;
  - (11) one of a distributor and an advertisement; and
  - (12) an indication of copyright.
- 230. (New Claim) The method of claim 227, said method further comprising the steps of:

selecting one datum from the group consisting of:

- (1) a datum that identifies a unit of computer software in said television signal;
- (2) a datum that specifies some of a way to instruct receiver end equipment what specific programming to select for one of playing and



recording other than programming immediately at hand, how to load said programming on one of a player and a recorder, when and how to one of play and record said programming other than immediately, how to modify said programming, which one of equipment, channel, and channels to transmit said programming on, when to transmit said programming, and how and where to one of file, refile, and dispose of said programming;

- (3) a datum that designates an addressed apparatus;
- (4) a datum that specifies one of where, when, and how to locate a signal;
- (5) a datum that informs a processor of a fashion for identifying and processing a signal;
  - (6) a datum that is part of a decryption code;
- (7) a comparison datum that designates a communication schedule; and embedding said selected datum in said television signal.
- 231. (New Claim) A method of communicating data and update material to at least one mass medium programming receiver station, each of which includes a data receiver, a data storage device, a control signal detector, and a computer, each receiver station adapted to detect and respond to at least one instruct signal and to store data for subsequent processing, said method comprising the steps of:

receiving data to be transmitted and delivering said data to a transmitter; receiving said at least one instruct signal, said at least one instruct signal being effective in said receiver station to select and store data to be used as a source for generating at least one receiver specific datum for presentation during the course of a mass medium program, said mass medium program including audio;

transferring said at least one instruct signal to said transmitter; and transmitting an information transmission comprising said data and said at least one instruct signal.

- 232. (New Claim) The method of claim 231, wherein one of some identification data and said at least one instruct signal are embedded in a television signal containing said data.
- 233. (New Claim) The method of claim 231, wherein said step of transmitting directs said information transmission to a plurality of receiver stations at the same time, and each of said plurality of receiver stations one of receives and responds to said at least one instruct signal concurrently.
- 234. (New Claim) The method of claim 231, wherein said step of transmitting directs said information transmission to a plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

235. (New Claim) The method of claim 231, further comprising the steps of receiving said data at a receiver in said transmitter station, communicating said data from said receiver to a memory location, and storing said data at said memory location for a period of time prior to communicating said data to said transmitter.

236. (New Claim) A method for data promotion and delivery for use with an interactive audio output apparatus, said interactive audio output apparatus having an input device for receiving input from a subscriber, an output device, and a processor for processing said subscriber reply and controlling delivery of said data in response to instructions, said method comprising the steps of:

outputting audio that promotes data;

prompting said subscriber in said audio whether said subscriber wants said data promoted in said step of outputting;

receiving a reply from said subscriber at said input device in response to said step of prompting;

delivering instructions at said interactive audio output apparatus in response to said step of receiving, said instructions controlling said interactive audio output apparatus;

processing said instructions from said step of delivering, said instructions being effective to select and store at least one first datum to be used as a source

E/

for generating at least one second datum for presentation during the course of an audio programming presentation; and

delivering said data on the basis of said instructions.

- 237. (New Claim) The method of claim 236, wherein said at least one of said instructions is embedded in one of the non-visible and the non-audible portion of a mass medium program signal.
- 238. (New Claim) The method of claim 236, wherein one of information evidencing one of the availability, the use and the usage of said outputted audio and said data are one of stored and communicated to a remote data collection station, said method further comprising the step of selecting evidence information that one of identifies and designates at least one of:
  - (1) a mass medium program;
  - (2) a use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) one of a source and a supplier of data;

- (11)\ one of a distributor and an advertisement; and
- (12) \an indication of copyright.
- 239. (New Claim) The method of claim 236, wherein at least one of said instructions incorporates code, said method further comprising the steps of communicating said code to said processor and performing, on the basis of said code, one step selected from the group consisting of:
  - (1) receiving a signal containing said data;
- (2) actuating one of a video, audio, and a print output device to output said data;
  - (3) decrypting a least a portion of said data;
- (4) controlling a selective transmission device to communicate said selected specific output to said selected specific output device;
  - (5) generating a receiver specific datum to present with said data; and
- (6) delivering a receiver specific datum at said interactive mass medium program output apparatus one of simultaneously and sequentially with one of said mass medium program and said data.
- 240. (New Claim) A method for data promotion and delivery, said method adapted for use with an interactive mass medium program output apparatus having an input device to receive input from a subscriber, a memory for storing at least one of code and a datum, a processor, a transmitter for communicating information to a remote site, said interactive mass medium

output apparatus and said remote site comprising a network having a plurality of transmitter stations, said method comprising the steps of:

outputting a first mass medium program that promotes data, said first mass medium program including audio;

prompting said subscriber during said first mass medium program whether said subscriber wants said data promoted in said step of displaying;

receiving an reply from said subscriber at said input device in response to said step of prompting;

processing said reply from said step of receiving and selecting at least one of said code and said datum designating said data;

communicating said selected at least one of said code and said datum to said remote site;

assembling, in said network, a signal which is effective at said interactive mass medium program output apparatus to select and store data to be used as a source for generating at least one receiver specific datum for presentation during a second mass medium program, said interactive mass medium program output apparatus having a receiver for receiving at least some of said signal from said remote site;

delivering said signal at said interactive mass medium program output apparatus; and

selecting and storing said data designated in said step of processing on the basis of said signal.

Ch/

- 241. (New Claim) The method of claim 240, wherein at least some portion of said signal unit is embedded in the non-visible portion of a television signal.
- 242. (New Claim) The method of claim 240, wherein information evidencing one of the availability, the use and the usage of one of said mass medium program and said data is one of stored and communicated to a remote data collection station, said method further comprising the step of selecting evidence information that one of identifies and designates at least one of:
  - (1) a mass medium program;
  - (2) a use of data;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable\system;
  - (8) a time of transmission;
  - (9) a unique identifier datum;
  - (10) one of a source and a supplier of data;
  - (11) one of a distributor and an advertisement; and
  - (12) an indication of copyright.

Ent.

243. (New Claim) The method of claim 240, wherein said signal unit incorporates code said method further comprising the steps of communicating said code to said processor and performing, on the basis of said, one step selected from the group consisting of:

- (1) receiving a signal containing said data;
- (2) actuating one of a video, audio, and a print storage or output device to one of store and output said data;
  - (3) decrypting teast a portion of said data;
- (4) controlling a selective transmission device to communicate said data to one of a storage and an output device;
- (5) generating a receiver specific datum to on the basis of said data;
- (6) delivering mass medium programming at said interactive mass medium program output apparatus simultaneously or sequentially with at least some of said data.